Notes from the 01/24/06 MI BPM Upgrade Meeting
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These notes can be found in Beams docDB #1526.

Agenda as announced:

  Project Announcements
  Combiner Board status
  Transition Board
  Transition Board I/O
  Timing Board
  Hardware Installation, cables
  Front-end software
  Online software
  Validation
  AOB

0. Project Announcements

   - The most important announcement is the party proposed for lunch on
Feb 3. A few people cannot attend but it turns out that most can so we
will go ahead and celebrate on Feb 3 at noon at Connie's in Naperville
(the Iroquois Center location). More details will go out as we get
closer to the date.

1. Combiner Board

   - There is an access to install. Approximately 45 remain to
be installed and we will continue to look for opportunities to install
boxes.

2. Transition Board: Manfred

   - Andrea spent every waking hour (more or less) assembling the
remaining two prototype boards for the House 44 installation. This
includes the patches, connectors, etc. The boards are to be finished by
noon on Tuesday (24th), testing will be done after, should be ready for
Wednesday or Thursday installation.

   - There remained a problem with the 2.5 MHz test signal and work
proceeds on improving the quality of that signal.

   - Manfred showed a proposal for the initial gain settings for the
board - can be found in beams-doc-2107.

   - The board layout should be completed on Tuesday or Wednesday (24th

or 25th) and the final files will go to Bob Forster for the bid.

3. Transition Board I/O

  - Stefano gave a summary of current status and it can be found as a file in docDB 1526.

  - Progress continues on the I/O board. A third board was made, another VME 6U subrack was borrowed to set up a teststand and work continues to test the system both in the AD setup and in FCC.

  - The system is ready for the MI40 installation and for testing the functionality of the system.

4. Timing Board

  - The board is ready for the MI40 installation and the functionality needed initially.

  - A bug has been found in the interrupts when certain mode changes are requested. It will be tracked down and squashed.

5. Hardware Installation, cables, etc.

  - All cables, subracks, backplanes, etc. have been located or made and will be ready for the MI40 installation.

  - Some care will be taken during the installation to not impact the Recycler (or anything else connected in the MI40 service building).

6. Front-end software

  - The system now works with 10 Echotek boards in one crate.

  - The system now listens to the prepare for beam TCLK.

  - People have discussed safe mode and hae some ideas about implementation.

  - Some discussion about how to set LOW-MED-HIGH gain settings.

7. Online software

  - Libraries have been modified to to allow switching between the old and new systems.

- I39 should work properly with the new data. W68 should work with
the new TBT data. I42 is being worked on. I50 and I52 need to be
relinked to work with the new system.

8. Hardware acquisition

  - The first DAWN crate had a main power supply failure during early testing. It will be
returned. A second crate has been requested so testing can continue.

  - Cables are being delivered with most due by mid-February.

  - Backplanes for the 6U crates still need to be ordered.

  - Cable testing will occur (and is proceeding) as the cables come in.

9. BLT replacement

  - Bob discussed some options for BLT functionality using a MI BPM upgrade style
system. More discussion and details need to be discussed.

10. Validation

  - Many plots were shown (I counted 9) showing details of multiple injections, slip-
stacking, timing of injection and extraction, safe mode, pbar transfers from the
accumulator to the recycler, turn-by-turn pbar data, TBT pbar resolution (about 50
microns 1 sigma), among other things.

   - Rob will likely be writing all of this up.

9. AOB

  - Some questions of timing will be discussed on Friday Jan 27. Rob Kutschke will call
the meeting.